

Clean Version of Amended Claims

1. A device for sorting of laundry pieces comprising
a recognition device (40) for recognizing of different
types of laundry pieces (12);
a plurality of collection devices for receiving the
different types of laundry pieces;
a transport device disposed within a reach of the
recognition device and disposed in a delivery
relationship to the plurality of collection devices
(14, 16, 18) for transferring the laundry pieces from
the recognition device (40) to the collection devices
(14, 16, 18), wherein the recognition device 40 monitors
a region 44 by laser 42;
-- with the data processing plant (DVA 50) for
processing of the data signals (46) received from the
recognition device (40), such that predetermined
collection devices (14, 16, 18) are selected depending
on the data signals (46) and are controlled for
receiving laundry pieces coordinated to the data
signals (46), wherein
-- at least one register device (62, 64, 66, 68, 70) is
predisposed to the collection devices (14, 16, 18), for
registering of the laundry pieces (12) disposed in the
transport device (20, 60) and for generating a
corresponding registering signal (48),

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-- the register signal (48) is sent from the registering device (62, 64, 66, 68, 70) to the data processing plant (50),

-- the register signal (48) associated with a certain piece of laundry together with the data signal (46) corresponding to the certain piece of laundry is processed in the data processing plant (50) to a control signal (74),

-- the control signal (74) is employable for controlling a predetermined collection device (14, 16, 18) for receiving of the laundry piece corresponding to the control signal.

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3. (amended) The device according to claim 1 wherein in each case a blower device (52, 54, 56) is coordinated to the collection device (14, 16, 18),

wherein the blower device (52, 54, 56) is connected with respect to control to the data processing plant (50),

wherein a control signal (74) delivered by the data processing plant (50) directs the corresponding blower device (52, 54, 56) for generating of a stream of air, wherein this stream of air is directed horizontally and perpendicularly to the direction of the transport device (60) in the region of the laundry (12) conveyed separately each other and disposed in the collection device area corresponding to this blower device, such

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that the laundry (12) is blown into the collection container (14, 16, 18), wherein a control signal (74) delivered by the data processing plant (50) is re-generated and the corresponding blower device (52, 54, 56) generates a stream of air when laundry (12) is not blown into container.

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9. The device according to claim 1 wherein at least one feed device (24, 26) of the supply device (20) is such predisposed that a predetermined number of laundry pieces (12) with a mutual distance not falling below a predetermined minimum value or a not lower time interval is transferable to the supply device (20).

10. The device according to claim 9 wherein the feed device (24, 26) includes a first transport band (90) exhibiting at least individual compartments, wherein the contents of the first transport band is emptied onto a transport band leading to the recognition device (40).

11. The device according to claim 9 wherein the feed device includes at least one funnel (24, 26), wherein the contents of the funnel (24, 26) is emptied onto a transport band (20) leading to the recognition device (40).

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12. The device according to claim 11 wherein the funnel (24, 26) is furnished with a flap floor (32), wherein the flap floor (32) is flipped open and flipped closed that the laundry pieces (12) falling out of the funnel (24, 26) are transferred to the recognition device (40) in each case with a mutual distance not falling below a predetermined minimum measure and/or a time interval not falling below a predetermined minimum measure.

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14. The device according to claim 12 wherein several such funnels (24, 26) are present and disposed, wherein the flap floors (32) of all funnels (24, 26) are flipped open only jointly and are flipped closed only jointly.

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18. The device according to claim 17 wherein the transport device includes a transport band; wherein the collection devices are disposed along the transport band in transport direction; wherein the control means includes a first blower device coordinated to the first collection device and a second blower device coordinated to the second collection device; wherein a control signal delivered by the data processing plant directs the corresponding blower device to generate of a stream of air;

wherein this stream of air is directed against the transport band in the region of the laundry piece disposed in a collection device area of the transport band corresponding to this blower device, such that the laundry piece is blown into the respective collection container;

further comprising

a second registration device associated with the second collection device.

19. The device according to claim 18 wherein the first registering device is predisposed and preswitched to the first collection device;
wherein the second registering device is predisposed and preswitched to the second collection device.

20. The device according to claim 18 wherein the first registering device is disposed following to the first collection device;
wherein the second registering device is disposed following to the second collection device.

21. The device according to claim 17 wherein the transport device includes
supply device for transporting the laundry pieces to
the recognition device);
further comprising

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a feed device of the supply device being such
predisposed that a predetermined number of laundry
pieces with a mutual distance not falling below a
predetermined minimum value or a not lower time
interval is transferable by the feed device to the
supply device;

wherein the feed device includes a first transport band
exhibiting at least individual compartments,
wherein the first transport band is disposed such that
the contents of the first transport band is emptied
onto a transport band leading to the recognition
device;

wherein the feed device includes a funnel, wherein the
contents of the funnel is emptied onto the transport
band leading to the recognition device;

wherein the funnel is furnished with a flap floor,
wherein the flap floor is flappable open and flappable
closed such that laundry pieces falling out of the
funnel are transferred to the recognition device in
each case with a mutual distance not falling below a
predetermined minimum measure or a time interval not
falling below a predetermined minimum measure;

wherein the flap floor is formed from a plurality of
flap parts.

22. The device according to claim 21 further comprising
a second funnel;

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a second flap floor associated with the second funnel,
wherein the second flap floors of the second funnel is
only jointly flappable open and only jointly flappable
closed together with the first flap floor of the first
funnel.

further comprising

a first sensor device for recognition of a
predetermined number or volume of laundry pieces
present within the first funnel;

a second sensor device for recognition of a
predetermined number or volume of laundry pieces
present within the second funnel.

24 The method according to claim 23 further comprising
including a transport band in the transport device;
disposing the plurality of collection devices along the
transport band in a transport direction;
coordinating a blower device to one of the plurality of
the collection device;
connecting the blower device to the data processing
plant for controlling the blower device;
furnishing each one of the plurality of collection
devices with a register device;
delivering a control signal to the data processing
plant for directing the corresponding blower device to
generate a stream of air;

directing this stream of air horizontally and perpendicularly to the direction of the transport device in the region of the certain laundry piece disposed in the collection device area corresponding to this blower device;

blowing the certain laundry piece into the predetermined collection container.

27. The device according to claim 23 further comprising
furnishing a supply device for transporting of laundry pieces to the recognition device;
predisposing a feed device of the supply device such that a predetermined number of laundry pieces with a mutual distance not falling below a predetermined minimum value or a not lower time interval is transferable to the supply device;
furnishing a first transport band exhibiting at least individual compartments to the feed device;
emptying a contents of a first transport band onto a transport band leading to the recognition device;
furnishing at least one funnel to the feed device;
emptying a contents of the funnel onto the transport band leading to the recognition device;
furnishing the funnel with a flap floor;
flipping open and flipping closed the flap floor such that laundry pieces falling out of the funnel are transferred to the recognition device in each case with

a mutual distance not falling below a predetermined minimum measure or a time interval not falling below a predetermined minimum measure.

28. The device according to claim 23 further comprising employing and disposing several funnels each furnished with a flap floor;
wherein the flap floors of all funnels are flipped open only jointly and are flipped closed only jointly;
furnishing a sensor device for recognition of a predetermined number or volume of laundry pieces within each funnel;
disposing the sensor device at each flap part for recognition of a predetermined number or volume of laundry pieces on each flap part.